UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

September 20, 2007

Duke Power Company LLC
d/b/a Duke Energy Carolinas, LLC
ATTN: Mr. G. R. Peterson
Vice President
McGuire Nuclear Station
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

SUBJECT: McGUIRE NUCLEAR POWER STATION, NOTIFICATION OF INSPECTION AND REQUEST FOR INFORMATION

Dear Mr. Peterson:

During the period of December 10-14, 2007, the NRC will perform the baseline Public Radiation Safety Inspection at the McGuire Nuclear Power Station, (NRC Inspection Procedures 71121.01, 71121.03, 71122.01, 71122.03 and Radiation Safety Sections of 71151 and 60855.1). Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. It is important that all of these documents are up to date and complete, in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. A member of the inspection team has scheduled a two-day pre-inspection visit with your staff for November 19-20, 2007. During this visit the inspector will review the Independent Spent Fuel Storage Installation (ISFSI) facilities and documentation. The material requested will be reviewed and collected at that time.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Kay Crane of your organization. If there are any questions about this inspection or the material requested, please contact the lead inspector, Ruben K. Hamilton at (404) 562-4672.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system(ADAMS).

ADAMS is accessible from the NRC Web site at http://www.nrc.gov/ reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Brian R. Bonser, Chief
Plant Support Branch 1
Division of Reactor Safety

Docket Nos. 50-369, 50-370
License Nos. NPF-9, NPF-17

Enclosure: Public Radiation Protection Inspection Document Request

cc: Page 3

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cc: Page 3

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OFFICE	RII:DRS	RII:DRS	RII:DRP				
SIGNATURE	/RA/	/RA/	/RA/				
NAME	B. Bonser	R. Hamilton	J. Moorman				
DATE	9/20/2007	9/19/2007	9/20/2007				
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY **DOCUMENT NAME: C:\FileNet\ML072640338.wpd**

Pre-Inspection Document Request

Public Radiation Safety Cornerstone

Licensee: McGuire Nuclear Power Station
Docket Number(s): 50-369, 370
Inspection Dates: November 19-22, 2007 (bagman), December 10-14, 2007

Inspection Procedures to be performed:

71122.01	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	(1/24/05)
71122.03	Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program	(1/24/05)
71121.01	Access Control to Radiologically Significant Areas	(10/6/06)
71121.03	Radiation Monitoring Instrumentation and Protective Equipment	(1/24/05)
71151	Performance Indicator Verification	(10/6/06)
60855	Operation of an ISFSI (RP aspects)	(10/6/06)

The most recent inspection completed for the listed inspection procedures was performed on the date indicated in parenthesis to the right of the inspection procedure title. Documentation is requested from the date of the previous inspection to the present.

We would prefer as much of the information as possible in electronic form. An index to the CD contents is also helpful. For those items requesting a list of documents/areas, the inspectors will select documents/areas from the list for on-site review.

If you have any questions, please call Ruben K. Hamilton at 404-562-4672. Thank you in advance for all your effort in putting together this material.

Assistance Requested During Bagman Trip

☐ Introductions to, and discussions with, licensee personnel who will be assisting with the inspection

☐ Plant familiarization “tour”

☐ Health physics assistance in walk-down of ISFSI

Assistance Requested During On-Site Inspection

☐ Identification of work activities during the inspection for inspector observations, including notification of pre-job briefings.

☐ Advance notification of any liquid or gaseous effluent releases, including the associated pre-release sampling, analysis, and permit generation.

☐ Health physics assistance in plant walk-downs assessing access controls, e.g. verifying the posting and locking of entrances to HDR-HRA and VHRA, and spent fuel pool controls.

Enclosure

☐ Assistance in plant walk-downs of the liquid and gaseous effluent systems and associated radiation monitors.

☐ Assistance in plant walk-downs of radiation monitors, including ARMs, CAMs, whole body counters, personnel contamination monitors, etc.

☐ Assistance with walk-down of meteorological equipment.

☐ Assistance with observations of REMP sample collection and processing.

General Information Request

☐ Telephone numbers of contacts

☐ Plant, Radiation Protection, and Chemistry organizational charts

☐ Electronic copy of applicable chapters of UFSAR (e.g. radiation protection program, effluents and environmental monitoring programs, radiation monitoring system, etc.)

☐ Latest revision of the Offsite Dose Calculation Manual (ODCM)

☐ List of radiation protection and chemistry (i.e. effluents) procedures

☐ Most recent DAW 10 CFR Part 61 analytical results.

☐ Corrective Action Program procedures

☐ Procedure(s) for identifying, notification, tracking, and correcting PI occurrences

☐ List of all Performance Indicators (PIs) and copies of associated corrective action reports for Occupational Exposure Control Effectiveness and RETS/ODCM Radiological Effluent Occurrences

☐ Audits and self-assessments performed since the last inspection that encompass the areas of (1) radiation protection, (2) access controls, (3) effluent treatment and monitoring program (including chemistry and count room), (4) radiological environmental monitoring program, (5) meteorological monitoring program, (5) radioactive material control, (6) radiation measurement instrumentation program (fixed and portable), and (7) respiratory protection program.

60855 Operation of an ISFSI (Last inspected 10/6/2006)

☐ Procedures associated with the ISFSI facility. Procedures should include:

- Radiological surveys, postings, and radiation control barricades
- Environmental monitoring (including TLDs)
- Loading of casks
- Routine activities

☐ Radiation surveys of the ISFSI since the last inspection.

☐ ALARA reviews and planning and associated RWPs for cask loading activities

☐ Environmental monitoring results (e.g. TLDs)

☐ Radiological records for the loading of casks since the last inspection

☐ Records of contamination incidents since the last inspection.

☐ List of corrective action reports related to the ISFSI with respect to radiation protection (i.e. access controls, ALARA, contamination, radiation levels, etc.) since the last inspection.

71121.01 Access Controls to Radiologically Significant Areas (Last inspected 10/6/06)

☐ Site and corporate procedures associated with the access control program. Procedures should include:

- Radiological surveys, postings, and radiation control barricades
- Security and control of high radiation sources/objects stored in pools
- Radiation Work Permits
- Radiological Job-Coverage
- Controlling access to High Radiation Areas (HRAs), High Dose Rate High Radiation Areas (HDR-HRAs), and Very High Radiation Areas (VHRAs)
- Key controls for all high radiation areas
- Radioactive material control, including contamination and hot particles
- Dosimetry monitoring (electronic dosimeters, multi-badging, etc.)
- Calculations of internal exposures

☐ List of the 10 most exposure significant work areas within radiation areas, high radiation areas (<1R/hr), or airborne radioactivity areas in the plant. This may include areas with low dose rates but high collective dose. Identify any high radiation areas with significant dose rate gradients (factor of 5 or more), including underwater diving activities.

☐ List or map of HRAs, LHRAs, HDR-HRAs (>25 rem in one hour @ 30 cm), and VHRAs. Include areas with the potential to become a HRA during routine operations or outages.

☐ Internal dose assessments, including calculations, for any internal exposures greater that 50 mrem CEDE since the last inspection.

☐ List of corrective action reports generated since the last inspection related to access controls, including the following:

- Access controls, including high radiation area radiological incidents
- Radiological events caused by radiation worker errors
- Radiological events caused by radiation protection technician errors

☐ *Available for onsite review during the inspection:*

- Elevation maps with most recent operating and outage radiation survey levels.
- RWPs for the top five dose rate areas or tasks; RWPs for airborne activity areas.

71122.03: Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program (Last inspected 1/24/2005)

☐ Site and corporate procedures associated with the REMP program, meteorological monitoring, and radioactive material control program. These procedures should include:

- Environmental sampling methodology for each matrix (e.g. TLD, ground and surface water, milk, vegetation, sediment, etc.) including sample collection, preparation, and analysis
- Calibration and maintenance of sampling equipment
- Calibration and QC activities for sample counting instruments
- Calibration, maintenance, and routine surveillance of meteorological instruments
- Control, survey and release of individuals and materials from the RCA
- Response to alarms at RCA and/or protected area exits
- Calibration, maintenance, and use of small article monitors, tool monitors, etc.

☐ Two most recent Annual Environmental Monitoring Reports

☐ Calibration and maintenance records for air samplers and composite water samplers.

☐ Calibration records for environmental sample counting instruments, including control charts and LLD determination OR audits of quality control program of vendor laboratory used to analyze REMP samples, as appropriate.

☐ Interlaboratory comparison program results for the past two years (in-house laboratory or vendor laboratory). For in-house counting lab, quality control evaluation of results.

☐ Calibration/surveillance/maintenance records for the meteorological instruments since the last inspection.

☐ List of small article monitors, tool monitors, etc. and their locations (calibration records for select instruments will be requested by the inspectors after reviewing the list).

☐ List of corrective action reports generated since the last inspection related to the REMP and Radioactive Material Control program, including the following:

- REMP program, including sampling and sample analysis
- Meteorological monitoring program, including sensor problems, tower unavailability and data transmission/display discrepancies
- Radioactive material control

71122.01 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

(Last inspected 1/24/2006)

☐ Site and corporate procedures/manuals associated with the radioactive effluents treatment and monitoring program. Procedures/manuals should include:

- Calibration and routine surveillance procedures for the effluent monitors listed below, including set-point determination.
- HP/Chemistry/Operations procedures for liquid and gaseous effluent sampling, analysis, and release, including release permit generation

- Calibration and use of the effluent sample counting laboratory instruments (gamma spectroscopy, liquid scintillation, gas proportional)
- Counting laboratory QC activities, including daily/weekly calibration checks, control charts, and inter-laboratory comparison performance
- Surveillance activities on air treatment systems, including charcoal and HEPA filter testing
- Calculation of projected doses to members of the public from effluent releases

☐ Two most recent Annual Radioactive Effluents Release Reports.

☐ Two most recent calibrations for the following liquid and gaseous effluent monitors, including flow meter calibrations:

- Plant Vent Monitor - All Channels
- Containment Purge Monitor-All Channels
- Condenser Offgas Monitor
- Steam Generator Blowdown Monitor -Unit 1 A S/G
- Turbine Building Sump Monitor
- Radwaste Liquid Effluent Monitor (The final monitor before discharge)

☐ List of time periods during which the above listed effluent monitors were out of service since the last inspection.

☐ Most recent liquid and gaseous continuous release permits and most recent liquid and gaseous batch release permits (4 total).

☐ Two most recent surveillances of the air cleanup system for the routine main plant airborne effluent release pathway including flow rate determination and HEPA/charcoal efficiency determinations.

☐ Inter-laboratory comparison program results for effluent sample counting laboratory since the last inspection.

☐ List of corrective action reports generated since the last inspection related to effluent monitoring equipment, effluent treatment systems, and air cleanup systems.

☐ *Available for onsite review by inspector during inspection:*

- Plant drawings sufficient to permit the inspector to walk-down the liquid and gaseous effluent processing systems and effluent/process radiation monitors to verify current system configuration/operation agrees with the descriptions contained in the UFSAR and ODCM.
- List/description of modifications and design changes, including procedural or operational changes, made to effluent treatment, monitoring, or sampling systems or to plant ventilation systems since the last inspection.

71121.03 Radiation Monitoring Instrumentation and Protective Equipment

(Last inspected 1/24/2005)

☐ Site and corporate procedures/manuals associated with radiation monitoring instrumentation and respiratory protection. Procedures/manuals should include:

- Operation, calibration, and maintenance of ARM, CAM, portal monitor (PM), personnel contamination monitor (PCM), and tool monitors, including set-point determination
- Operation and calibration of Whole Body Counter (WBC) equipment
- Issuance/operation of portable survey instruments
- Calibration and maintenance of portable instruments (e.g. ion chambers, friskers, teletectors, rem-ball)
- Actions to be taken when portable instrument found to be significantly out of tolerance/calibration
- Issuance and use of respiratory protective equipment (emphasis on SCBA and air-supplied equipment)
- Training, including fit-testing, for use of SCBA and supplied-air systems
- SCBA maintenance activities, including vital components (i.e. regulators)
- Determination/verification of Grade D air for SCBA

☐ If PASS capabilities have been modified through license amendment, provide a copy of the amendment and applicable SER

☐ Two most recent surveillances of PASS equipment (or equivalent equipment as approved by license amendment)

☐ Two most recent calibrations for the following ARM/CAM equipment:

- Control Room Ventilation
- Spent Fuel Pool
- Radioactive Waste Processing

☐ Two most recent calibrations for PCMs and PMs located at the RCA exit.

☐ Most recent calibration of WBC and copy of the analysis library.

☐ Records of certification of air quality for equipment used to provide breathing air for air-supplied respirators and SCBA bottles since the last inspection.

☐ List of corrective action reports generated since the last inspection involving radiation monitoring and protective equipment deficiencies, including the following:

- Area radiation monitors and continuous air monitors
- Portable instrumentation, PCM, PM, and WBC monitoring equipment
- Respiratory protection equipment and program implementation.

☐ *Available for onsite review by inspector during inspection:*

- Inventory, inspection, and maintenance records for SCBA equipment

- Training records, including fit-testing, for SCBA-qualified individuals
- Training records/certification for individuals qualified to perform maintenance on vital components (e.g. regulators) on SCBA